



UNITED STATES PATENT AND TRADEMARK OFFICE

JA

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/614,349	07/08/2003	Oleg Morenko	2993-491US PJF/rl	7842

32292 7590 02/08/2005

OGILVY RENAULT (PWC)
1981 MCGILL COLLEGE AVENUE
SUITE 1600
MONTREAL, QC H3A 2Y3
CANADA

EXAMINER

CASAREGOLA, LOUIS J

ART UNIT PAPER NUMBER

3746

DATE MAILED: 02/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/614,349

Applicant(s)

MORENKO, OLEG

Examiner

Louis J. Casaregola

Art Unit

3746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,2,9,11,12,19,21 is/are rejected.
- 7) ☒ Claim(s) 3-8,10,13-18,20,22 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

Claim Rejections - 35 USC 102

Claims 1, 2, 9, 11, 12, and 19 are rejected under 35 USC 102(b) as being anticipated by Hosapple et al (US Pat. 5,392,596)

The claimed gas turbine and related combustor read on prior art turbomachines of the type disclosed by Hosapple. Attention is called to Hosapple's Figure 1, which shows a turbine engine comprising compressor section 16, turbine section 18, and combustor section 20. Attention is additionally called to Figure 2, which shows combustor mounting apparatus having joints formed by balls 182 and 206 in combination with corresponding spherical indents 178 and 202. A spring 208 holds each ball in place and thus establishes a longitudinal joint axis in the direction of spring compression. Each ball and its related indent, moreover, cooperate to define mating convex and concave surfaces having curvature in mutually orthogonal planes and rotational freedom about plural transverse axes as specified by the present claims. Note also that compression of spring 208 will further accommodate translation along the longitudinal axis as required by claims 2 and 12.

Claim 21 is rejected under 35 USC 102(b) as being anticipated by Bunce et al (US Pat. 6,490,868).

The combustor structure recited in claim 21 is sufficiently broad to read on apparatus of the type shown by Bunce. Attention is called to Bunce's Figure 1; the claimed pin and boss read respectively on elements 80 and 20 connected to combustor 12.

Element 80 further comprises ball 76 defining a first spherical surface, and element 20 comprises socket 52 defining a second spherical surface mating with the first spherical surface in the manner claimed.

Allowable Subject Matter

Claims 3-8, 10, 13-18, 20, and 22 contain allowable subject matter but are objected to as depending from rejected parent claims. If rewritten in independent form, these claims will be allowed.

Additional References

Rygelis et al is cited as disclosing a further pertinent example of a combustor mounting assembly having a joint comprising a pair of curved surfaces.

L. J. Casaregola
571-272-4826 (M-F; 7:30-4:00)
703-872-9306 FAX
February 7, 2005



**LOUIS J. CASAREGOLA
PRIMARY EXAMINER**

Art Unit: 3746

If repeated attempts to reach the examiner by telephone are unsuccessful, the art unit supervisor, Cheryl Tyler, can be reached at 571-272-4834.

Information regarding the status of this application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR, and status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).